

AMENDED CLAIMS

[received by the International Bureau on 26 April 2005 (26.04.2005);
original claims 1-10 replaced by amended claims 1-10]

Patent Claims

1. A compatible optical scanner (PU), which is compatible with an optical scanner (PU) in which a bias current of the laser (LD1 or LD2) is modulated for recording or reproduction apparatuses of optical recording media, comprising:
a laser modulator (M2) that at least partly or completely switches the laser current and
a means for simulating the input characteristic curve of a laser (LD1 or LD2) at an input (E) of said laser modulator (M2).
2. The compatible optical scanner (PU) as claimed in claim 1, wherein the means for simulating the input characteristic curve of a laser (LD1 or LD2) is a circuit arrangement that interacts with a current mirror of the optical scanner (PU), said current mirror being provided for regulating the light power of a laser (LD1 or LD2).
3. The compatible optical scanner (PU) as claimed in claim 2, wherein the current mirror of the optical scanner (PU) that is provided for regulating the light power of a laser (LD1 or LD2) is an operational amplifier (OPV) driving a field-effect transistor (FET), the noninverting input (+) of which amplifier is connected to a line carrying reference-ground potential (GD) via a first resistor (R1), the inverting input (-) of the operational amplifier (OPV) and the source of the field-effect transistor (FET) being connected to said line via a second resistor (R2), and the drain of the field-effect transistor (FET) is an output (Out) provided for regulating the light power of a laser (LD1 or LD2).

4. The compatible optical scanner (PU) as claimed in claim 1, wherein a series circuit of diodes (D1...Dn) that is connected upstream of a current mirror of the optical scanner (PU) that is provided for regulating the light power of a laser (LD1 or LD2) is provided for simulating the input characteristic curve of a laser (LD1 or LD2).
5. The compatible optical scanner (PU) as claimed in claim 1, wherein a zener diode that is connected upstream of a current mirror of the optical scanner (PU) that is provided for regulating the light power of a laser (LD1 or LD2) is provided for simulating the input characteristic curve of a laser (LD1 or LD2).
6. The compatible optical scanner (PU) as claimed in claim 4, wherein the diodes (D1...Dn) form a series circuit of diodes (D1...Dn) arranged in the forward direction with a forward voltage (DD) corresponding to the operating voltage of a laser (LD1 or LD2).
7. The compatible optical scanner (PU) as claimed in claim 5, wherein a zener diode with a zener voltage corresponding to the operating voltage of a laser (LD1 or LD2) is provided.
8. The compatible optical scanner (PU) as claimed in claim 1, wherein the means for simulating the input characteristic curve of a laser (LD1 or LD2) is arranged on the optical scanner (PU).
9. The compatible optical scanner (PU) as claimed in claim 1, wherein the means for simulating the input characteristic curve of a laser (LD1 or LD2) is integrated in the laser modulator (M2).

10. Recording or reproduction apparatus for optical recording media having an optical scanner (PU) as claimed in claim 1, wherein the means for simulating the input characteristic curve of a laser (LD1 or LD2) is arranged on a main circuit board (H) of the recording or reproduction apparatus.